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# USER MANUAL

**Q.HOME EDRIVE A**  
**7.2 kW / 11kW / 22 kW**

**qcells**

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# 1 Notes on this Manual

## 1.1 Scope of Validity

This manual is an integral part of the Q.HOME EDRIVE A Series EV-Charger. It describes the assembly, installation, commissioning, maintenance and failure of the product. Please read it carefully before operating.

Q.HOME EDRIVE A7S-7.2X Q.HOME EDRIVE A11T-11X Q.HOME EDRIVE A22T-22X

### Note

“Q.HOME EDRIVE A” is the product name.

“S” means single-phase, “T” means three-phase.

“7.2” means 7.2 kW, “11” means 11kW, “22” means 22 kW.

“X” : without LCD screen.

This product series is Socket Type with only socket outlet.

Keep this manual at where it is accessible all the time.

## 1.2 Target Group

This manual is for qualified electricians. The tasks described in this manual can only be performed by qualified electricians.

## 1.3 Symbols Used

The types of safety instructions and general information appear in this document are as described below:



“Danger” indicates a hazardous situation which, if not avoided, will result in death or serious injury.



“Warning” indicates a hazardous situation which, if not avoided, could result in death or serious injury.



“Caution” indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



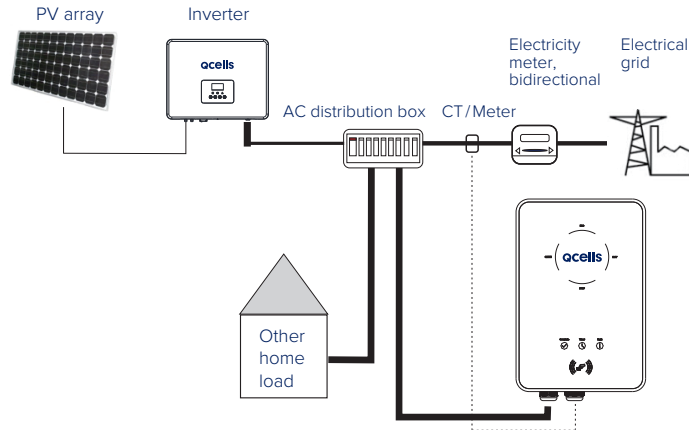
“Note” provides tips that are valuable for the optimal operation of your product.

## 2 Safety

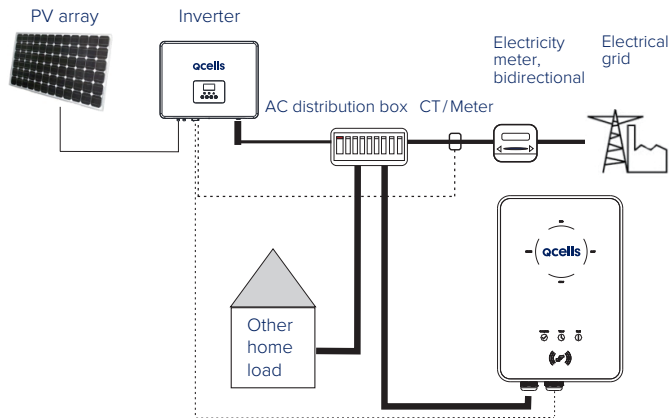
### 2.1 Appropriate Usage

The Q.HOME EDRIVE A Series are AC EV charger, intended to be installed in a fixed location and connected to the AC supply.

#### Communication with CT/Meter



#### Communication with Inverter



#### Note

For the use with Q.HOME+ ESS HYB-G3 System the meter is included in the Q.SAVE Matebox. It does not need to create an additional connection to the meter.

### 2.2 Important Safety Instructions



- Danger to life due to output and input high voltages in this device!
- All work must be carried out by qualified electrician who has knowledge of and experience in dealing with electrical installations.
- The device is not to be used by children or persons with reduced physical sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.
- Children should be supervised to ensure that they do not play with the device.



- Danger of burn injuries due to hot enclosure parts!
- The device can heat up during operation.
- Incorrect operation or misuse may result in:
  - Injury or death to the operator or third parties.
  - Damage to the device and other property of the operator.
  - Inefficient operation of the device.









Risk of electric shock!

- Prior to the application, please read this section carefully to ensure correct and safe application. Please keep the user manual properly.
- Use only accessories recommended or sold by Qcells. Otherwise the device may be damaged, impaired in function or people can be injured.
- Ensure that all wirings are carried out according to the local applicable normative requirements.
- Do not disassemble any parts of the EV-Charger which are not mentioned in installation guide. See Warranty for instructions on obtaining service. Attempting to maintain the Q.HOME EDRIVE A Series EV-Charger by yourself may result in a risk of electric shock or fire and will void your warranty.
- Keep away from flammable, explosive materials to avoid fire disaster.
- The installation place should be away from humid or corrosive substance.
- Ensure that all installation work (assembling, personal protective equipment, ...) is carried out according to the local applicable normative requirements.
- Do not use the EV-Charger in case the device has defects, cracks, abrasion, bare leakage etc. Please contact the working staff in case of above conditions.
- In case any emergency condition happens, please press the EMERGENCY STOP button immediately, cutting off all input and output power supply.
- During charging, the electric vehicle is not allowed to drive. Charging only when the electric vehicle is in parking position. For hybrid car, charging only when switching the engine off.

## 2.3 Explanation of Symbols

This section gives an explanation of all the symbols shown on the EV-Charger type label.

Symbol	Explanation
	CE mark. The EV-Charger complies with the requirements of the applicable CE guidelines.
	TUV certification.
	Danger of high voltages. Danger to life due to high voltages in the EV-Charger!
	Danger. Risk of electric shock!
	The EV-Charger can not be disposed together with household waste. Used electrical devices must be collected separately and recycled in an environmentally responsible manner. Ensure that you return your used device to your dealer or obtain information regarding a local, authorised collection and disposal system.
	The EV-Charger can be recycled.

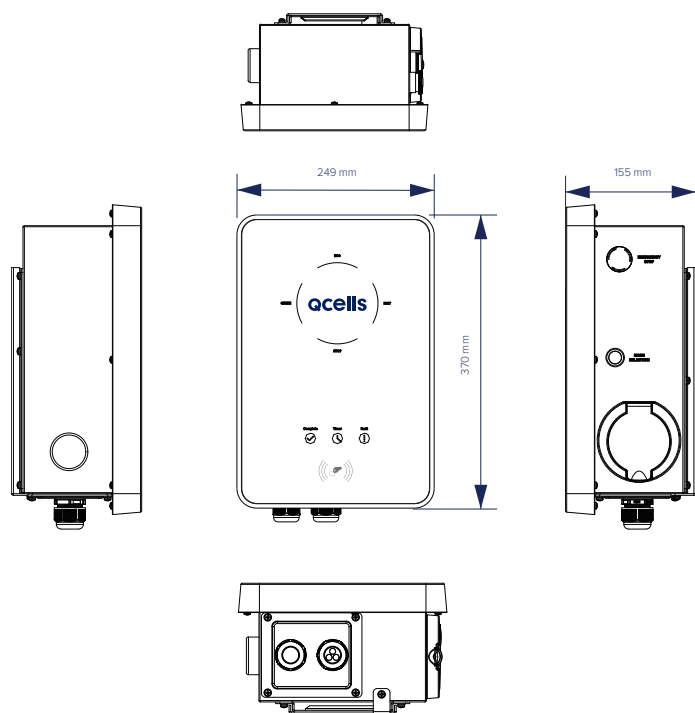
## 3 Introduction

### 3.1 Basic Features

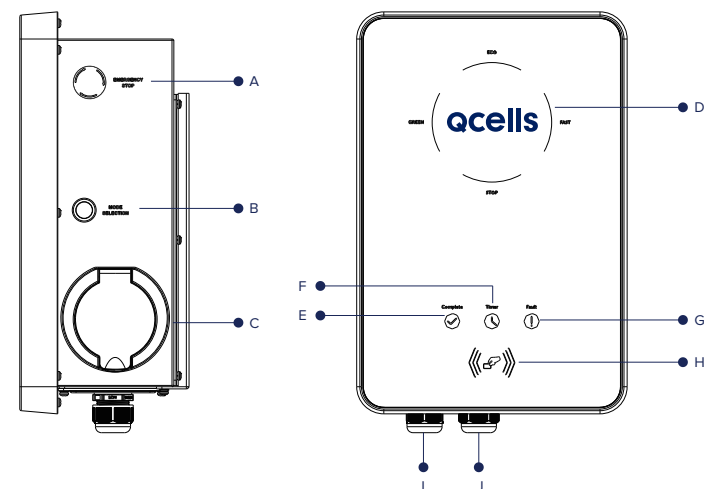
Thanks for purchasing with the Qcells Q.HOME EDRIVE A Series EV-Charger. The Qcells Q.HOME EDRIVE A Series can be used for charging your electric vehicle in your home. Also you can choose single or three phase with socket type, you can consult our salesmen for specific details. The features of the Qcells Q.HOME EDRIVE A Series are listed as below.

- Integrated current failure monitoring (30mA AC & 6mA DC)
- Integrated with PEN protection and no earth rod
- Encrypted communication based on TLS
- Indoor and outdoor easy installation
- Form an intelligent photovoltaic, storage and EV charging energy system through the communication between the smart EV-Charger and Qcells inverter
- Capable with 100% green energy generated from your solar generation
- Multiple work modes to fit different situations
- Integrated RFID function
- Remote setting and monitoring with APP and website
- Smart dynamic load balance control
- Set timers to reduce your cost during peak and valley price

## 3.2 Dimension



## 3.3 Product Description



Object	Name	Description
A	EMERGENCY STOP	Pressing emergency button, the EV-Charger will stop operating.
B	MODE SELECTION	Press to select certain mode.
C	Charging connector base	For connecting charging connector.
D		Operating status: The corresponding mode light will be on when operating.
E	LED indicator	Complete: When the light is on the EV-Charger completes charging or is in idle state.
F		Timer: When the light is on, the boost mode is running.
G		Fault: The red light will be on when error occurs.
H	Card swiping position	Swipe card here.
I	Connector	INPUT: For AC input connection.
J		COM: For communication connection.

## 4 Technical Data

### 4.1 General Data

	A7S - 7.2 X	A11T - 11X	A22T - 22 X
<b>AC Nominal Input</b>			
Phases/Lines	L + N + PE	3P + N + PE	3P + N + PE
Voltage [V]	230	400	400
Frequency [Hz]	50/60; ±5	50/60; ±5	50/60; ±5
<b>AC Nominal Output</b>			
Voltage [V]	230	400	400
Current [A]	32	16	32
Power [W]	7200	11000	22000
<b>Interface</b>			
RS485		YES	
RFID Frequency		13.56 M	
CT Clamps	×1	×3	×3
Housing Material		Plastic / Metal	
Installation Method	Wall-mounted (Optional: pedestal-mounted)		
Wall-mount Bracket		YES	
Charging Outlet	Socket Type (Socket-outlet)		
Operating Temperature [°C]		-30 to +50	
Working Humidity	5% - 95% without condensation		
Working Altitude [m]		<2000	
Degree of Protection		IP65	
Protection Class		Class I	
Application Site		Indoor / Outdoor	
Cooling Method		Natural cooling	
Dimension (W x H x D) [mm]		249 x 370 x 155	
Net Weight [kg]		7	
<b>Communication Info</b>			
Communication Mode		Wi-Fi	
EIRP Power	17.41 dBm (Measured Max. Average)		
Frequency	2412 to 2484 MHz		
Antenna Gain		4 dBi	
Antenna Type		IPEX	
Wireless Mode		802.11 b/g/n	

### 4.2 Security Protection

	A7S - 7.2 X	A11T - 11X	A22T - 22 X
<b>Multiple Protection</b>			
Over / Under voltage protection		YES	
Overload protection		YES	
Current leakage monitoring		YES	
Grounding protection		YES	
Surge protection		YES	
Over temperature protection		YES	
Integral earth leakage monitoring	Integrated current failure monitoring (30 mA AC & 6 mA DC) *		
Safety Standard	IEC61851-1; IEC62196-2		
Built-in PEN fault technology		YES	
Warranty		3 years	

\* This document does not replace any regional, state, provincial or national laws, regulations or standards that apply to the installation, electrical safety and use of the product. Always observe the local regulations as well.

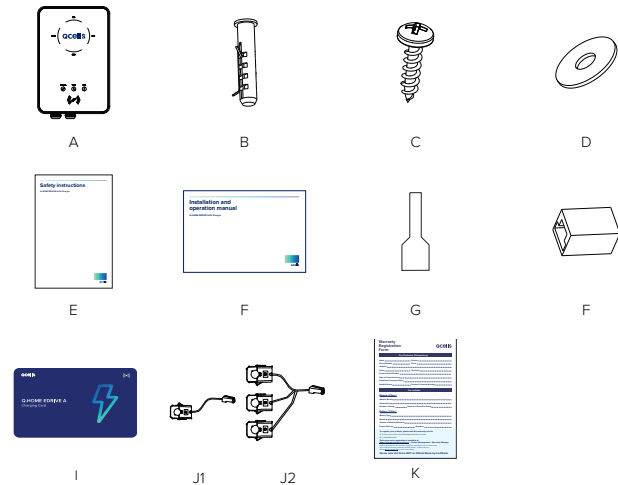
## 5 Installation

### 5.1 Check for Transport Damage

Make sure the EV-Charger is intact during transportation. If there are some visible damages, such as cracks, please contact your seller immediately.

### 5.2 Packing List

Open the package and fetch out the product, check the accessories at first. The packing list is shown as below.



Object	Quantity	Description
A	1	Q.HOME EDRIIVE A series EV-Charger
B	3	Expansion bolt
C	3	Self tapping screw
D	3	Gasket
E	1	Safety Instructions
F	1	Quick Installation Guide
G	3/5	Ferrules (3 for single-phase; 5 for three-phase)
H	1	RJ45 terminal adapter
I	2	RFID card
J	1	CT (J1 for single-phase; J2 for three-phase)
K	1	Warranty card

### 5.3 Installation Precaution

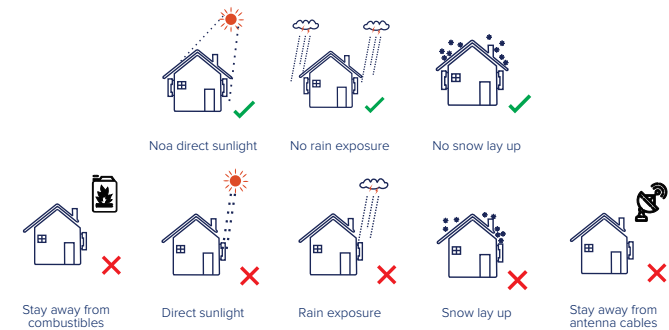
The EV-Charger is designed for wall-mounted installation (IP65).

Make sure the installation site meets the following conditions:

- Not exposed to sunlight directly.
- Not in areas where highly flammable materials are stored.
- Not in potential explosive areas.
- Not near the television antenna or antenna cable.
- Not higher than altitude of about 2000m above sea level.
- Not in environment of precipitation or humidity (5% to 95%) .
- Make sure that the ventilation is good enough.
- The ambient temperature in the range of  $-30^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$ .
- The slope of the wall should be within  $\pm 5^{\circ}$ .

The wall on which the EV-Charger will be installed should meet the conditions below:

- Solid brick/concrete, or strength equivalent mounting surface;
- The EV-Charger must be supported or strengthened if the wall's strength isn't enough (such as wooden wall, the wall covered by thick layer of decoration).





### Available Space Size

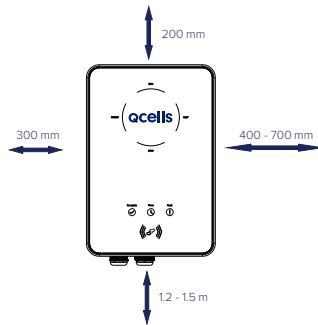


Table: Available Space Size

Position	Min. Distance
Left	300 mm
Right	400 to 700 mm
Top	200 mm
Bottom	1.2 to 1.5 m
Front	300 mm

### 5.4 Installation Steps

#### Preparation

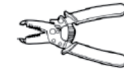
- Below tools are needed before installation.



Marker



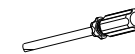
Ø 8 drill



Stripping pliers



Wire crimper



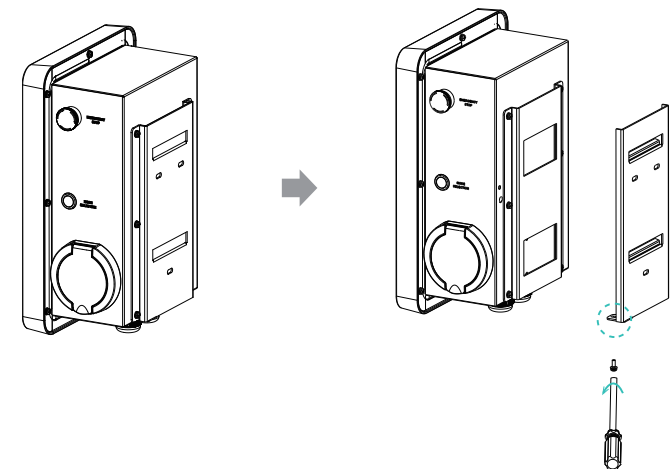
Cross screwdriver



Straight screwdriver

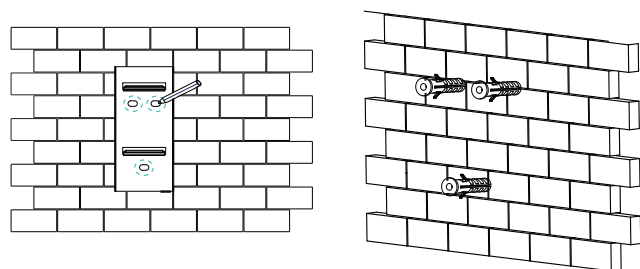
- Prepare a communication cable with RJ45 and an input cable with outer diameter of 12.5 to 18 mm (min.  $3 \times 2.5 \text{ mm}^2 / 5 \times 4 \text{ mm}^2$ ).
- A Residual Current Device (RCD) type A is recommended for the protection of the AC power supply.

- Remove the screw from the EV-Charger. Then remove the back bracket carefully.

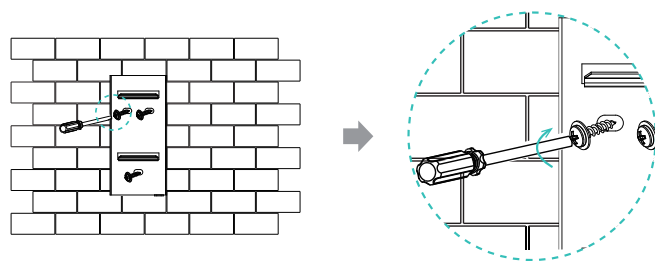


**2** Fix the back bracket to the wall.

- Mark the position of the holes.
- Insert the expansion bolts.
- Drill holes with  $\varnothing 8$  drill.
- Depth: at least 45mm.



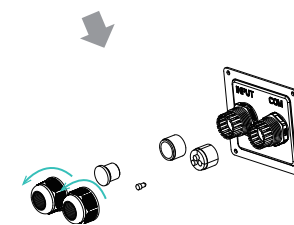
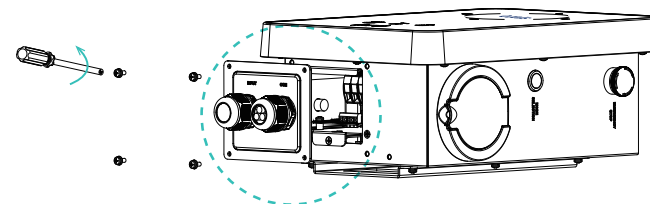
- Align the bracket with the holes, and screw the self tapping screws.



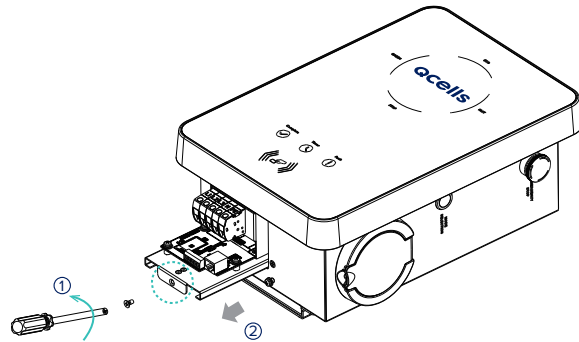
(torque:1.5 to 2N·m)

**3** Hang the EV-Charger on the wall for trial, then estimate the required length of input cable and communication cable. After that, take the EV-Charger down.

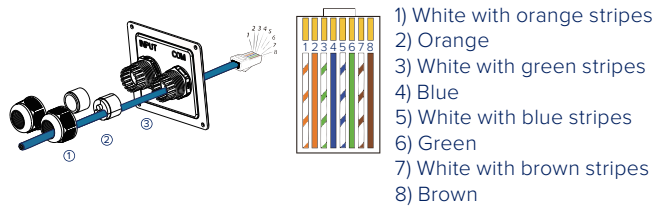
**4** Unscrew the EV-Charger's rear cover and take it down. Disassemble the cable glands into its individual parts.



- 5 Unscrew the countersunk screw of the base plate of communication board. Then pull the base plate of communication board out.



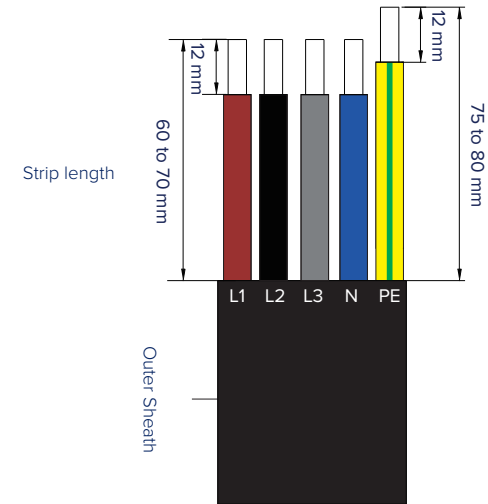
- 6 Insert the prepared communication cable through the cable gland in sequence as shown below (Ensure the correct wiring when crimping is needed).



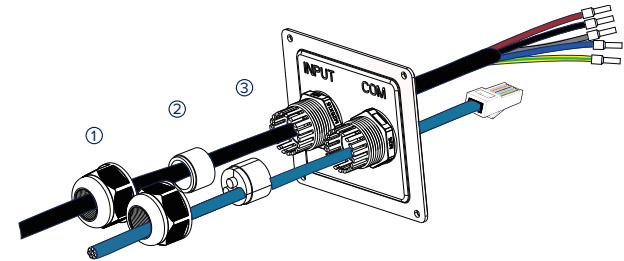
PIN	1	2	3	4	5	6	7	8
Definition	L1_CT+	L1_CT-	L2_CT+	A1	B1	L2_CT-	L3_CT+	L3_CT-

\* PIN 3, 6, 7, 8 is null for single-phase.

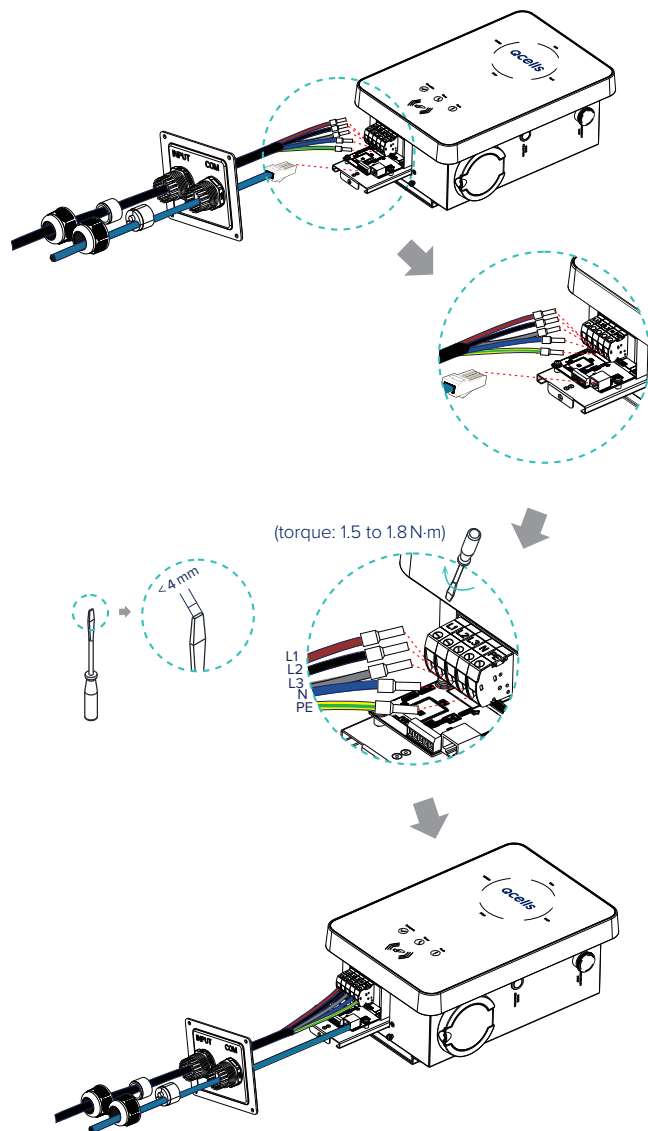
- 7 Strip the outer sheath of the input cable as below, ensuring all the wires can reach the terminal blocks with a little excessive length. Use the stripping pliers to strip approx. 12 mm of insulation from the end of all the coloured wires as below. Then crimp the ferrules with the wire crimper.



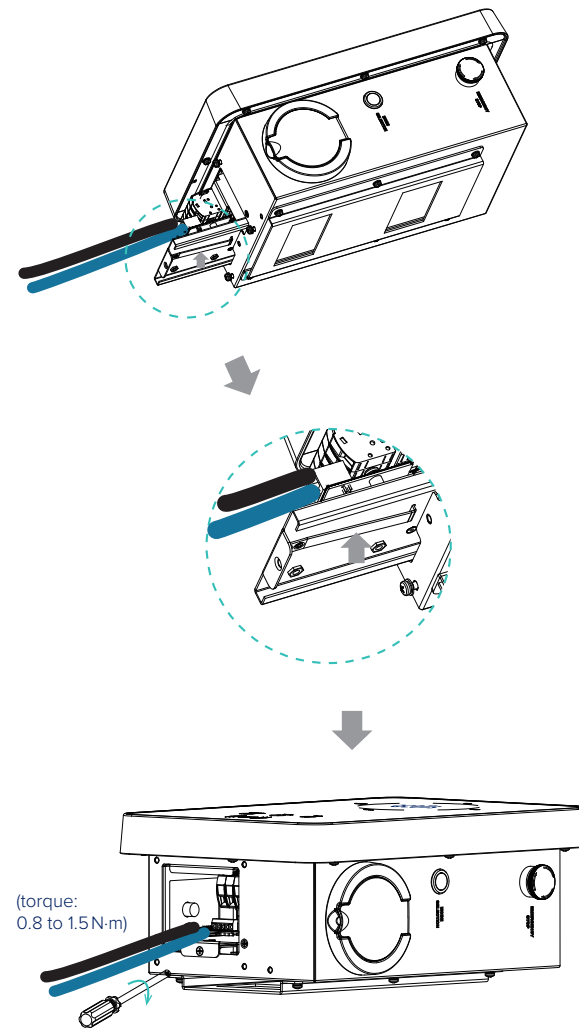
- 8 Insert the input cable through the cable gland in sequence as shown below.



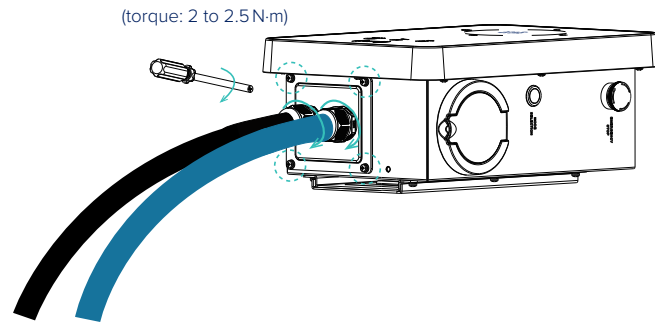
- 9 Insert the wires into the appropriate holes of the terminal blocks, then block the terminals with the straight screwdriver.



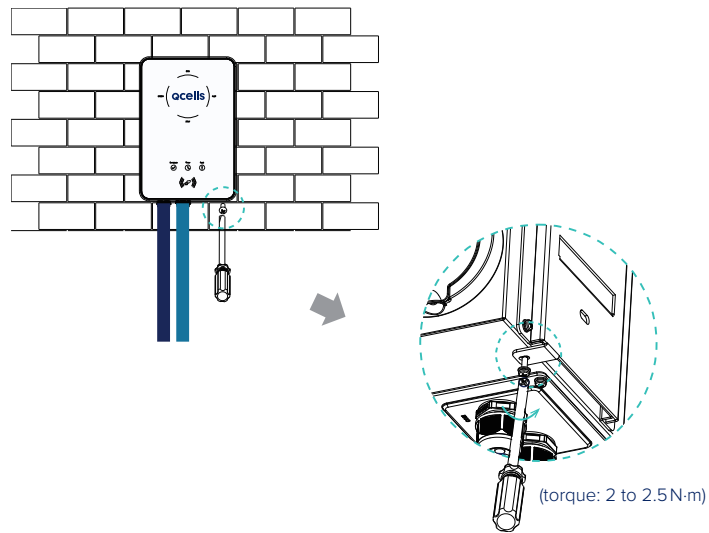
- 10 Press the spring upward and push the base plate of communication board in. Then assemble the countersunk screw.



- 11** Push the rear cover to appropriate position of the cables and assemble the self tapping screws. Then tighten the cable glands.

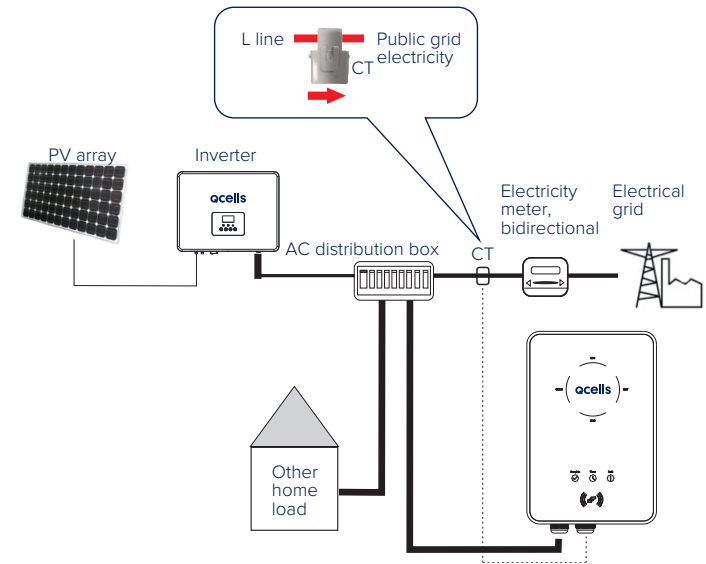


- 12** Hang the EV-Charger up carefully and steady the EV-Charger with the self tapping screw.



5.5 CT connection

Diagram

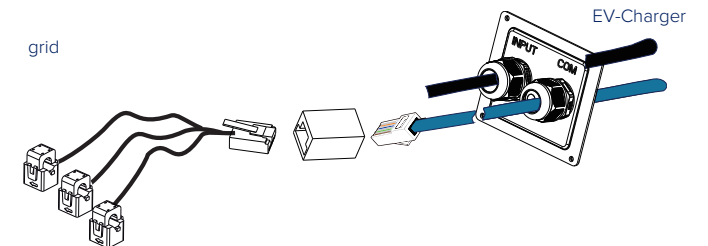


**Note**

The arrow on the CT must point at the public grid.

Connection Steps

- Steady the CT on the public grid.
- Insert the other end of the communication cable and the terminal of CT into each side of the RJ45 terminal adapter.



\* Just by installing without Q.HOME ESS HYB G3 System.

**Note**

- Do not place the CT on the N Wire or the PE wire.
- Do not place the CT on the N and L wire simultaneously.
- Do not place the CT on the non-insulated wires.
- When using the three-phase CT, please clip the CT clamps on the corresponding phases.

**Note**

- Please follow the manufacturer's instructions, when using several additional components.

## 5.6 Run the EV-Charger

Check all below steps before powering on the EV-Charger.

- Check that the device is fixed well on the wall.
- AC cable is connected to grid correctly.

After powering on the EV-Charger,

- Check the status of LED indicators, the complete light should be on when the EV-Charger starts normally.
- If the Complete light is not on, please check if it is correctly installed and connected to the grid.



Power to the unit must be turned on only after installation work has been completed. All electrical connections must be carried out by qualified personnel in accordance with legislation in force in the country concerned.

**Note**

Equipment only to be used for the purpose outlined by Qcells.

## 6 Operation Method

### 6.1 States

There are six states of the Q.HOME EDRIVE A Series EV-Charger, i.e. Idle, Stop, Charge, Complete, Fault and Unavailable.

States	Indicator Light & Description
Idle	The Complete light is on and the MODE SELECTION button is invalid. The connector is not inserted.
Stop	The STOP light is on. The EV-Charger is connected with EV but not charging.
Charge	The corresponding charging mode light is on. The EV-Charger is charging.
Complete	The Complete light and the STOP light are on at the same time. The EV-Charger has completed charging and the MODE SELECTION button is invalid.
Fault	The Fault light is on. The EV-Charger is in fault state.
Unavailable	The four charging mode lights are on at the same time. The EV-Charger is remote upgrading.

### 6.2 Start-up Patterns

The Q.HOME EDRIVE A Series EV-Charger has two start-up patterns, namely plug & charge and card-swiping pattern. The plug & charge pattern is the default pattern, and the card-swiping pattern needs to “enable” the “RFID Function” in the APP advanced settings.

#### Plug & charge pattern

For Socket Type, the electronic lock will be locked when the EV-Charger starts charging and unlocked when the charging stops.

#### Card-swiping pattern

For Socket Type, the electronic lock will be locked when the EV-Charger starts charging after swiping the card, and unlocked after swiping the card when the charging stops.

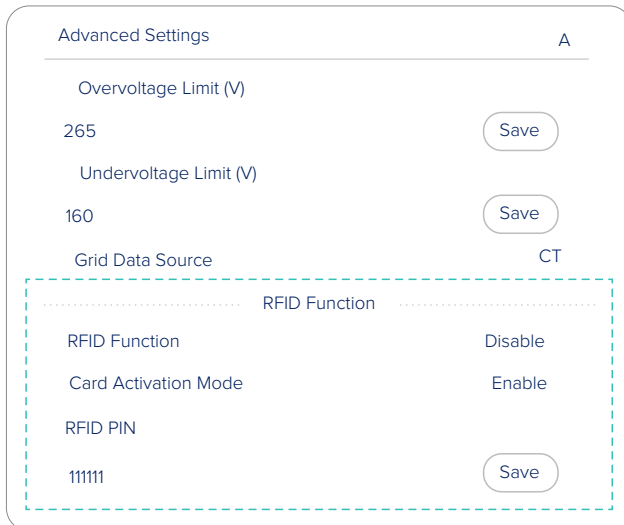
#### Note

The charging can be stopped from the vehicle end or the charger end (by long pressing “MODE SELECTION” button, by APP setting or by swiping card). In card-swiping pattern, the electronic lock will not unlock automatically when the charging stops, and users need to swipe the card again to unlock it.

### Card Activation

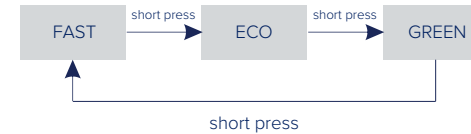
If the user wants to use the card-swiping pattern, the RFID cards need to be activated at the EV-Charger. Please follow the instructions below:

- 1 Enable the Card Activation Mode of Advanced Settings in the APP. Once enabled, the four operating LED indicator lights on the EV-Charger will light up in sequence and cycle.
  - Note**
  - The default RFID PIN is 111111, the user can modify the RFID PIN before activation, and the password of the RFID card will be updated to the RFID PIN after activation. The password of the RFID card must be consistent with the one set in the APP. The RFID PIN is 6 digits.
- 2 Swipe the RFID card at the EV-Charger.
- 3 If successfully activated, the EV-Charger will beep.
- 4 Disable the Card Activation Mode in the APP or wait for 1 minute after activation, the EV-Charger will turn to standby state.
- 5 Enable the RFID Function of Advanced Settings in the APP to use the card.



### 6.3 Charging Modes

Short press the "MODE SELECTION" button, the charging mode will switch among FAST, ECO and GREEN Modes.



Long press the "MODE SELECTION" button, the current charging mode will switch to STOP mode. When the EV-Charger is in STOP mode, short press the "MODE SELECTION" button, the EV-Charger will switch back to the previous charging mode.(Only available in plug & charge pattern.)



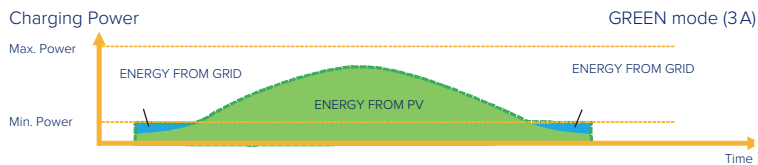
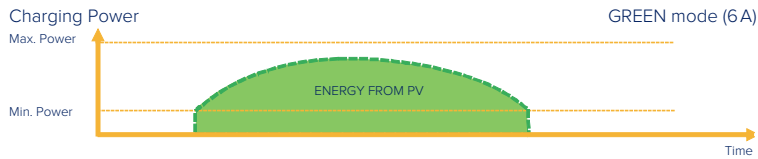


### GREEN Mode

In GREEN Mode, the EV-Charger will maximize the use of surplus power generated from the inverter. According to the minimum start-up charging power, the charging current can be divided into two levels as 3A and 6A. The default level is 6A.

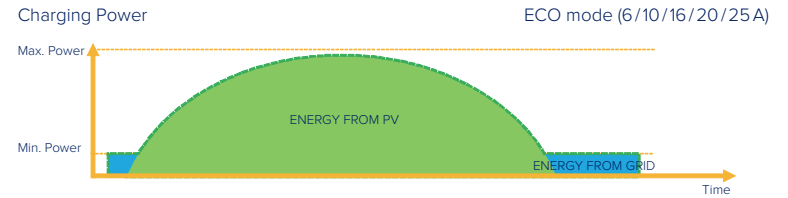
In the 6A level, the EV-Charger won't use the power generated from grid at all.

In the 3A level, the EV-Charger would start charging only when photovoltaic power supply is more than 3A. Meanwhile, if the photovoltaic power supply is less than 6A, the EV-Charger needs to buy extra electricity from grid for minimum start-up charging power (1.4kW for single-phase, 4.2kW for three-phase).



### ECO mode

In ECO Mode, the charging power is continuously adjusted according to changes in generation or power consumption elsewhere in the house, thereby minimizing the use of grid power. In this mode, users can set charging current at five different levels, i.e. 6A, 10A, 16A, 20A and 25A (only 6A and 10A for Q.HOME EDRIVE A11T-11X). If at any time, the available surplus power falls below the fixed value of power, such as 1.4kW (4.2kW for three-phase), the shortfall will be drawn from the grid.



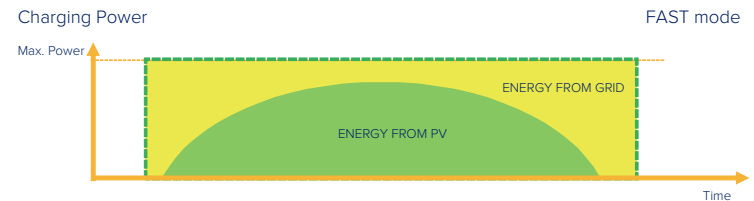
### Note

When the Q.HOME EDRIVE A Series EV-Charger is charging in GREEN or ECO mode.

- The charging electric vehicle must comply with the IEC61851 standard, otherwise the EV-Charger won't work.
- If there is a zero injection requirement for the system, the EV-Charger must communicate with the inverter in order to charge normally.

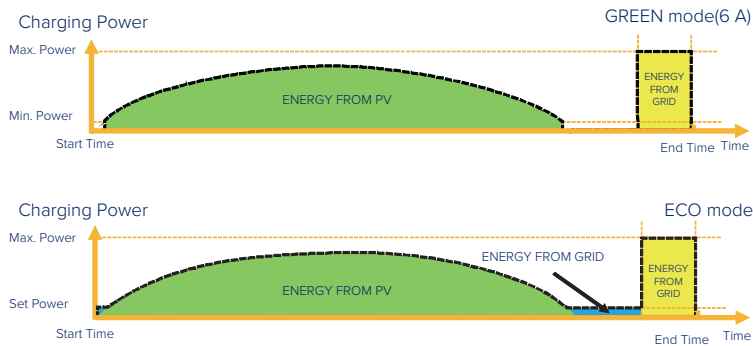
### FAST mode

In FAST Mode, the EV-Charger will charge the EV at the fastest rate regardless of whether the power generated by PV is sufficient and import grid electricity if the power generated by PV is insufficient.



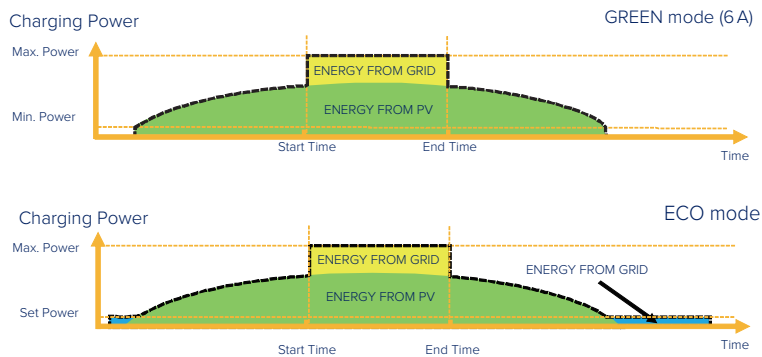
### Smart Boost

Before using the Smart Boost function, set the desired charging energy (kWh) and end time for the vehicle charging on the APP. The EV-Charger will complete the charging of the EV with desired energy before the preset end time at maximum charging power and will use the photovoltaic power supply as much as possible and minimize the use of grid power. (E.g.: The user needs to charge the EV to 40 kWh before 10:00AM, then the Charging power is depended on the surplus power generated by the inverter.)



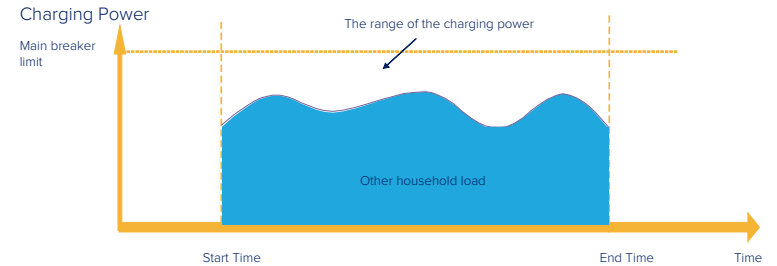
### Timer Boost

When using ECO or GREEN charging modes, the EV-Charger can be programmed to 'boost' the current charge in a certain period. In timer boost mode, the charging rate is set to maximum (just like FAST mode), regardless of the amount of available surplus power. This means that the power may be drawn from the mains grid supply during boost times. If the EV is fully charged, the EV-Charger will stop charging.



### 6.4 Dynamic Load Balance

The Q.HOME EDRIVE A Series EV-Charger has default dynamic load balancing function. During the charging period, no matter in which work mode, the total power of the house will not exceed the main grid capacity. To ensure the total power of the house doesn't exceed the grid capacity, the charging power will be adjusted in real time following the total load power.



## 7 App Setting

The screen shots here are for reference only and the actual interfaces may differ. Users can update their APP as needed.

### 7.1 APP Account Login

If you don't have the app or Q.HOME's account yet, you can operate as below:

#### Q.HOME Registration

- 1 Use your smart phone to scan below QR code or search for the keyword "Q.HOME" in browser to download the Monitoring App.

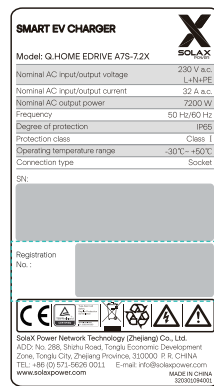
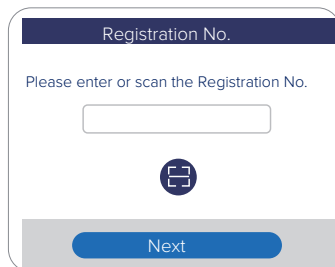


IOS



Google

- 2 Select the Setting button on upper left corner of the Monitoring App main screen to choose language.
- 3 Touch "Create a new account" at the bottom of Monitoring App main screen.
- 4 Type in or scan the Registration No. and type in other required information to complete the registration.

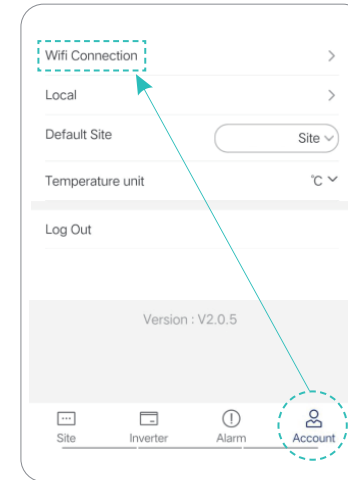


(Example for Registration No.)

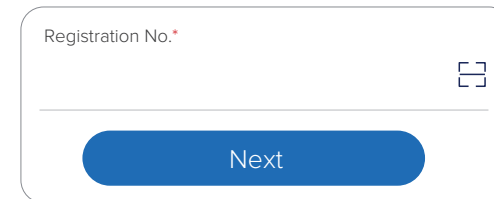
- If you already have the app and Q.HOME's account, you can operate as below.

### Wi-Fi Connection

- 1 Login your account and turn to Account page in the app.
- 2 Click "Wi-fi Connection".



- 3 Type in or scan the Registration No. of the EV-Charger. Then touch Next and agree to join the network of the Web-monitoring platform.



- 4 Type in your home Wi-Fi SSID and password, then Setting.  
\*5GHz Wi-Fi is currently not supported.

- 5 Wi-Fi setting successes.

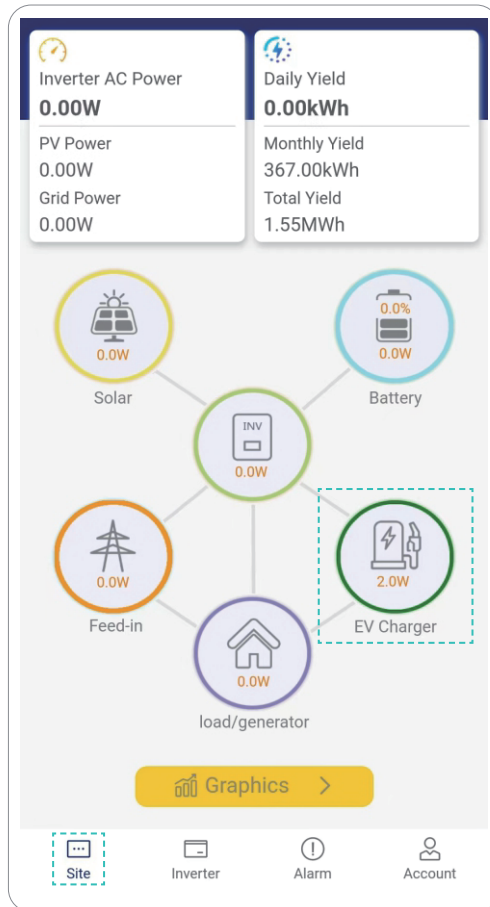
### Local Mode

Use your smart phone to connect the Qcells Wi-Fi signal (Wi-fi\_Sxxxxxxx). Then select **Local** and type in the password (initially same as the Registration No.) to access the Local Mode in the Monitoring App.

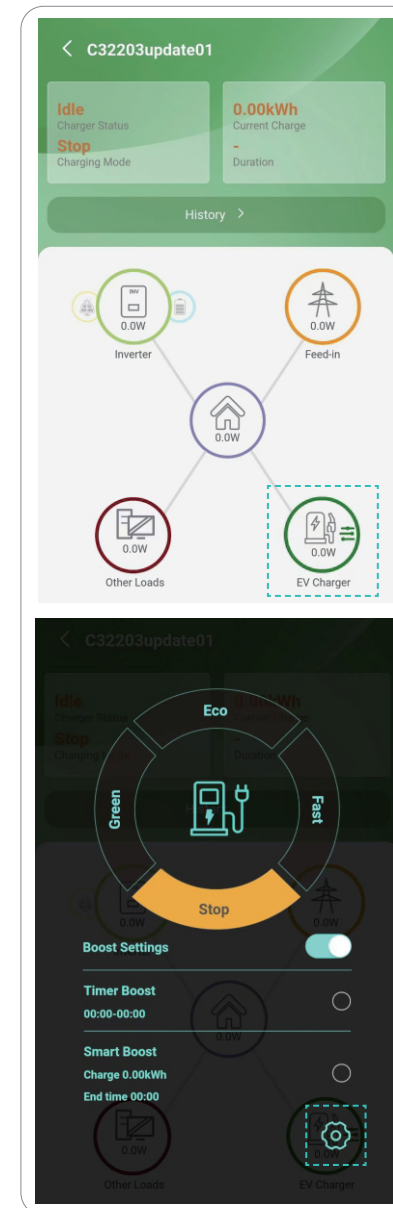
\*If manual WiFi configuration is required, the IP address is <http://192.168.10.10/>.

## 7.2 Settings for the EV-Charger

- 1 Select "Site" at the bottom and then touch the "EV Charger" icon and select your EV-Charger on the list.



- 2 Touch the "EV Charger" icon and then touch the setting button to enter the setting page.



- 3 Select "Mode Settings" and a drop-down list will appear. Set the levels of Green Mode (2 levels) and ECO Mode(5 levels for Q.HOME EDRIVE A7S-7.2X & Q.HOME EDRIVE A22T-22X, 2 Levels for Q.HOME EDRIVE A11T-11X) as you want.

Setting	
Version	1.02
Date Time	2022-03-01 00:00
Mode Settings	^
Green Mode	Level1 3 A
ECO Mode	Level1 6 A
Boost Settings	v
Main Breaker Limit	v
Advanced Settings	v

- 4 Select "Boost Settings" and a drop-down list will appear. Set the Start Time and End Time for Timer Boost, the Charge(kWh) energy and End Time for Smart Boost as you want.

Setting	
Version	1.02
Date Time	2022-03-01 00:00
Mode Settings	v
Boost Settings	^
----- Timer Boost -----	
Start time	00:00
End time	00:00
----- Smart Boost -----	
Charge (kWh)	0 <span>Save</span>
End time	00:00
Main Breaker Limit	v
Advanced Settings	v

- 5 Select “Main Breaker Limit” and set the value. With the dynamic load balance function, when the power consumption approaches the preset max value, the EV-Charger will reduce charge power so that the main breaker current will reduce to the preset value minus 5 A, thus avoid the situation of main breaker trip due to overload.

Setting	
Version	1.02
Date Time	2022-03-01 00:00
Mode Settings	v
Boost Settings	v
Main Breaker Limit	^
Main Breaker Limit (A)	
60	<input type="button" value="Save"/>
Advanced Settings	v

- 6 Select “Advanced Settings” and a drop-down list will appear.
- Set and save the value of “Overvoltage Limit” and “Undervoltage Limit”.
  - Touch “Grid Data Source” to select the source.
  - Touch “RFID Function” to enable or disable the function. Touch “Card Activation Mode” for the activation of the RFID card as described in section “Operation Method”.
  - The default setting can be restored and the EV-Charger can be reset by touching correspondent option.

Setting	
Version	1.02
Date Time	2022-03-01 00:00
Mode Settings	v
Boost Settings	v
Main Breaker Limit	v
Advanced Settings	^
Overvoltage Limit (V)	
265	<input type="button" value="Save"/>
Undervoltage Limit (V)	
160	<input type="button" value="Save"/>
Grid Data Source	CT
----- RFID Function -----	
RFID Function	Disable
Card Activation Mode	Disable
Restore factory settings	<input type="button" value="Save"/>
EV Charger Reset	<input type="button" value="Save"/>

### 7.3 Settings for Using the EV-Charger with HYB-G3 Inverter

#### EV-Charger side

Find the "Grid Date Source" setting on the APP and set it as "Inverter".

Setting	
Version	1.02
Date Time	2022-03-01 00:00
Mode Settings	v
Boost Settings	v
Main Breaker Limit	v
Advanced Settings	^
Overvoltage Limit (V)	
265	Save
Undervoltage Limit (V)	
160	Save
Grid Data Source	CT
----- RFID Function -----	
RFID Function	Disable
Card Activation Mode	Disable
Restore factory settings	Save
EV Charger Reset	Save



Cancel
OK

CT

Meter

---

**Inverter**

---

#### Inverter side

Either Remote Setting or Local Setting will work.

#### Remote Settings

Complete the "Meter/CT settings" and "Modbus" setting on the APP.

Advanced		Advanced	
Safety	v	Safety	v
Grid Parameters	v	Grid Parameters	v
Charger	v	Charger	v
Export Control	v	Export Control	v
Meter/CT Settings	v	Meter/CT Settings	v
Select	^	GMPPT	v
Meter	Save	Modbus	^
Meter		CommFunSelect	
Enable	Save	EV Charger	Save
Meter 1Addr		Braud Rate	
1	Save	9600	Save
Meter 2Addr		Address	
2	Save	1	Save
Meter 1 Direction		External ATS	v
Postive	Save	Power Factor	v
Meter 2 Direction		P(U) Function	v
Postive	Save	FVRT Setting	v

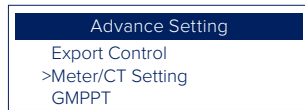
#### Note

Inverter "Meter/CT settings" are selected according to the actual connection.

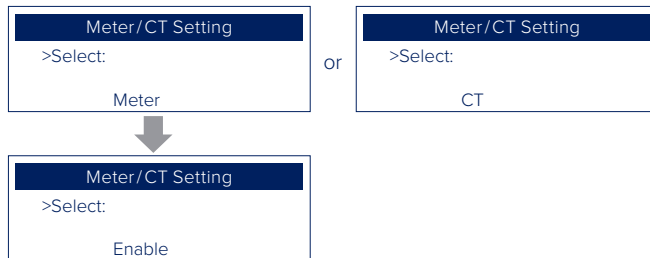


- Local Settings

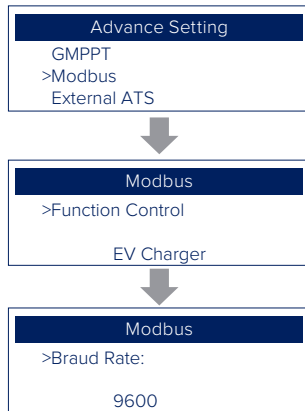
- 1 Enter the "Advance Setting" interface of the inverter.



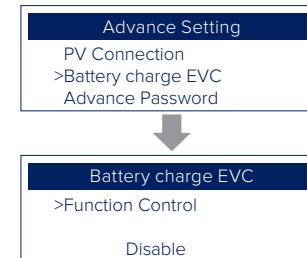
- 2 Set the meter or CT according to the actual connection.



- 3 Set "Modbus", set as "EV Charger", and set the baud rate to 9600.



- 4 Set as "Disable" in "Battery charge EVC"(to avoid the battery to discharge to the EV-Charger when there is no PV power supply).



# 8 Troubleshooting

This section contains information and procedures for solving possible problems with the Q.HOME EDRIVE A Series EV-Charger, and provides you with troubleshooting tips to identify and solve most problems that could occur with the Q.HOME EDRIVE A Series EV-Charger.

This section will help you narrow down the source of any problems you may encounter. Please read the following troubleshooting steps.

Check warnings or fault messages on System Control Panel or Fault codes on the EV-Charger information panel. If a message is displayed, record it before doing anything further.

Attempt the solution indicated in troubleshooting lists.

No.	Faults	Solution
0	PowerSelect_Fault	Contact installers for help
1	EmStop_Fault	1. Release the Emergency Switch. 2. Contact installers for help.
2	OverVoltL1_Fault	1. Confirm that the Grid Voltage is within the working range. 2. If the "Fault" indicator is off, try charging EV again. 3. If not, set the value of "Overvoltage Limit" to a proper range, the buzzer will beep after the value is saved. 4. Repeat step 2. 5. Contact installers for help.
3	UnderVoltL1_Fault	1. Confirm that the Grid Voltage is within the working range. 2. If the "Fault" indicator is off, try charging EV again. 3. If not, set the value of "Undervoltage Limit" to a proper range, the buzzer will beep after the value is saved. 4. Repeat step 2. 5. Contact installers for help.
4	OverVoltL2_Fault	Same as ErrorCode 2
5	UnderVoltL2_Fault	Same as ErrorCode 3
6	OverVoltL3_Fault	Same as ErrorCode 2
7	UnderVoltL3_Fault	Same as ErrorCode 3
8	ElecLock_Fault	Contact installers for help
9	OverLoad_Fault	1. Unplug the connector from the EV. 2. If the "Fault" indicator is off, re-plug in and try charging EV again. 3. If the "Fault" indicator persists, try another EV. 4. Contact installers for help.

No.	Faults	Solution
10	OverCurr_Fault	1. Unplug the connector from the EV. 2. If the "Fault" indicator is off, re-plug in and try charging EV again. 3. Contact installers for help.
11	OverTemp_Fault	1. Unplug the connector from the EV. 2. If the "Fault" indicator is off, re-plug in and try charging EV again. 3. If not, confirm that the conditions for installation are proper and waiting for cooling down, then re-plug in and try charging EV again when the indicator turns off. 4. Contact installers for help.
12	PEGround_Fault	1. Unplug the connector from the EV. 2. If the "Fault" indicator is off, check the EV whether it is normal. 3. If not, confirm that all the cables and wires are intact. 4. Contact installers for help.
13	PELeakCurr_Fault	1. Unplug the connector from the EV. 2. If the "Fault" indicator is off, check the EV whether it is normal. 3. If not, confirm that all the cables and wires are intact. 4. If the "Fault" indicator is off, re-plug in and try charging EV again. 5. Contact installers for help.
14	OverLeakCurr_Fault	Same as ErrorCode 12
15	MeterCom_Fault	Contact installers for help
16	485Com_Fault	1. If the "Fault" indicator is off, try charging EV again. 2. If the "Fault" indicator is on, confirm that all the communication wires are intact and confirm the selection of "Grid Data Source". 3. Restart. 4. Contact installers for help.
17	CPVolt_Fault	Same as ErrorCode 12

\* When your EV-Charger needs to be upgraded by the service personnel, please make sure to unplug the connector from the EV.

- If your EV-Charger's information panel is not displaying a Fault light, check the following list to make sure that the present state of the installation allows proper operation of the unit.
  - Is the EV-Charger located in a clean, dry, adequately ventilated place?
  - Are the specification and length of the cables suitable?
  - Are the input connections and wiring in good condition?
  - Are the configuration settings correct for your particular installation?
  - Are the display panel and the communication cable properly connected and undamaged?

Contact Qcells Customer Service for further assistance. Please be prepared to describe details of your system installation and provide model and serial number of the unit.

TEL.: + 49 (0)3494 6699 233 33

E-Mail: support.components@q-cells.com

## 9 Maintenance

The EV-Charger do not need any maintenance or correction in most condition. To ensure that the EV-Charger can operate properly for a long term, you are advised to perform routine maintenance on it.

Only trained and authorized professional personnel who are familiar with the requirements of safety was allowed to perform servicing and maintenance work.

### 9.1 Safety checks

Safety checks should be performed at least every 12 months by manufacturer's qualified person who has adequate training, knowledge, and practical experience to perform these tests. The data should be recorded in an equipment log. If the device is not functioning properly or fails any of the tests, the device has to be repaired. For safety check details, refer to section 2 Safety instruction in this manual.

### 9.2 Maintain periodically

Only qualified personnel may perform the following works.

During the process of using the EV-Charger, the manage person shall examine and maintain the machine regularly. The concrete operations are as follows.

- 1** Check that if the indicators of the EV-Charger are in normal state, check if the buttons of the EV-Charger are in normal state, check if the display of the EV-Charger is normal. This check should be performed at least every 6 months.
- 2** Check that if the input cable and the connector are damaged or aged. This check should be performed at least every 6 months.
- 3** Check whether the ground terminal and ground cable are securely connected every 12 months.
- 4** Clean the outer shell of the EV-Charger and check its security at least every 6 months.

## 10 Decommissioning

### 10.1 Dismantling the EV-Charger

- Disconnect the EV-Charger from the inverter and the grid.
- Wait for 5 minutes for de-energizing.
- Remove the EV-Charger from the bracket.
- Remove the bracket if necessary.

### 10.2 Packaging

If possible, please pack the EV-Charger with the original packaging.

If it is no longer available, you can also use an equivalent carton that meets the following requirements.

- Suitable for loads more than 10 kg.
- With handle.
- Can be fully closed.

### 10.3 Storage and Transportation

Store the EV-Charger in dry place where ambient temperatures are always between  $-30^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$ . Take care of the EV-Charger during the storage and transportation, keep less than 4 cartons in one stack.

### 10.4 Disposing of the EV-Charger

When the EV-Charger or other related components need to be disposed, have it carried out according to local waste handling regulations. Please be sure to deliver the wasted EV-Charger and packing materials to certain site where can assist relevant department to dispose and recycle.

## 11 Disclaimer

The Q.HOME EDRIVE A Series EV-Charger are transported, used and operated under limited condition, such as environmental, electrical etc. Qcells shall not be liable to provide the service, technical support or compensation under conditions listed below, including but not limited to:

- The EV-Charger is damaged or broken by force majeure (such as earthquake, flooding, thunderstorm, lighting, fire hazard, volcanic eruption etc.).
- The EV-Charger's warranty is expired and not extended.
- The EV-Charger's SN, warranty card or invoice cannot be provided.
- The EV-Charger is damaged by man-made causes.
- The EV-Charger is used or operated against any items in local policy.
- The EV-Charger's installation, configuration, commissioning doesn't follow the requirements mentioned in this manual.
- The EV-Charger is installed, refitted or operated in improper ways mentioned in this manual without authority from Qcells.
- The EV-Charger is installed, operated under improper environment or electrical condition mentioned in this manual without authority from Qcells.
- The EV-Charger is changed, updated or disassembled on hardware or software without authority from Qcells .
- Obtain the communication protocol from other illegal channels.
- Build monitoring, control system without authority from Qcells.

Qcells will keep right to explain all the contents in this user manual.

Documentation Link

